

Statement of Work and QA Requirements for Analysis of Methanol, Ethylene Glycol, and Polypropylene Glycol in Water Samples.

Synopsis: Water samples shall be provided to the ALS Environmental in Holland, Michigan for analysis of methanol, ethylene glycol, and propylene glycol in ground-water samples collected from a site located in Wyoming. ALS Laboratory will analyze the samples using EPA Method 8015M following their procedure HN-GC-004-R02. These data will be used as screening data to evaluate water quality of ground water collected from monitoring wells and domestic wells. This service will support research for the project "Ground-water Investigation in Pavillion, Wyoming", which is being conducted with Category 1 QA requirements (QA ID No. G-14478).

EPA Responsibilities: Samples shall be provided from ground-water monitoring wells and domestic wells located around Pavillion, WY. The wells will be sampled during April 2012. The vendor shall be notified at least one week in advance of the sample collection activities. Duplicate samples shall be collected in 10% of the wells, or as otherwise indicated in approved QAPPs. A total of up to 20 samples shall be submitted for methanol, ethylene glycol, and propylene glycol. This number includes samples, duplicates, equipment blanks, and field blanks. In addition to field duplicates, it is expected that the vendor shall select one sample for a laboratory duplicate analysis in each submitted set to fulfill QA/QC requirements. This sample needs to be from our submitted sample sets and not from another site or sample queue. At one selected location an additional two sample bottles will be collected for Matrix Spike and Matrix Spike Duplicate (MS/MSD) analysis.

The samples shall be collected unfiltered into 40 mL amber glass vials (precleaned and certified grade). The vials shall be filled to exclude headspace. These samples will be preserved by acidifying with hydrochloric acid (HCl, Optima). Sample bottles will be collected in duplicate in case of breakage; only one sample of the two collected from each location shall be analyzed. All samples will be transported on ice to: ALS Environmental, 3352 128th Avenue, Holland, MI 49424, with attention to Tom Beamish.

Contractor Responsibilities: The vendor shall determine the concentrations of methanol, ethylene glycol, and propylene glycol using EPA Method 8015M following their procedure HN-GC-004-R02.

Acceptance Criteria: The contractor's results shall be considered acceptable if samples are analyzed samples within the 14 day holding time using EPA Method 8015M following their procedure HN-GC-004-R02, the QA/QC requirements as summarized in the attached Table 1 are met, and data deliverables as described below are provided.

Deliverables: ALS Environmental shall submit a final report at completion of analysis which includes: tabulation of final results, list of SOPs used (title and SOP #), and full data packages. Full data packages (can be provided at a later date, within 30 days of issuing final results) shall be provided on CD or via email for all sample analyses to allow for reconstruction of analysis: Chain-of-custody forms, calibration data, QA/QC data, raw data, data reduction, data qualifiers, deviations from method requirements, deviations from QC acceptance criteria, and these deviations' impact to reported results. The electronic deliverables can take the form of MS Excel spreadsheets or pdf files of data reports and raw data. Results of the analysis shall be reported to Rick Wilkin via e-mail at wilkin.rick@epa.gov within five weeks of the receipt of the samples. The full data packages shall be copied to the GWERD QA Manager, Steve Vandegrift.

Period of Performance: 45 days from sample submission.

Technical Point of Contact: Dr. Richard Wilkin (580-436-8874), Email: wilkin.rick@epa.gov.

Table 1. ALS Environmental QA/QC Requirements for Methanol, Ethylene Glycol, and Propylene Glycol.

Blanks (frequency)	Calibration Checks (frequency)	Second Source (frequency)	Duplicates (frequency)	Matrix Spikes
<1/2QL (1 per batch of 20 or less samples)	85-115% of known value (after calibration, every 20 samples, end)	85-115% of known value (Each new calibration)	RPD \leq 50 For MS/MSD pair (every 20 samples or less)	50-150% recovery (One per 20 samples, or less),

The holding time for this analysis is 14 days.